**IT Applications Unit 3, AOS 1, Online Communities**

Complete the following, from Chapter 2, Problem-solving Methodology, pgs, 60-80

**Problem-solving Methodology: 4 Stages**

**Analyse**

**Design**

**Development**

**Evaluate**

**Case Study:**

**Indigenous Language Trust, (ILT)**

Using the case study, ILT complete the following:

**Analysis of the problem**

This stage involves the following three steps:

1. **Determining the solution requirements**
2. What needs to be established?  
   An internet based site that can have data and information travelling only between certain people... i.e. a personal Wiki.
3. How is the problem best defined?  
   The needs of the organisation are not being met by all requirements.
4. The aim of problem analysis is to ensure that the problem is clear enough to effectively analyse it and efficiently solve it. Define these two terms, efficiency and effectiveness.  
   Efficiency refers to time, cost and effort that might be put into producing a solution. A solution can be inefficient in the way it was produced, but then effective in the way it communicates information.   
   Effectiveness can be determined by the quality, relevancy, timeliness and clarity of the solution. A solution can be produced effectively but then be inefficient in the way in which it communicates information.
5. What type of organisation is the ILT?  
   The ILT is the Indigenous Language Trust, which is a non-profit community group (now national) aimed at preserving and developing Indigenous Language in Australia.
6. In your own words, define the problem for ILT.  
   The problem for ILT is that they cannot communicate the information easily between each capital city within Australia, due to the many different time zones.
7. Identifying data and information needed for the solution, p 62;
   1. Need to identify where data is coming from for online community – inside or outside
   2. In the ILT case study what is the information needed for the solution?  
      The information needed for this solution would be to use a personalised blog spot (i.e. Wiki) so that they can share data and information in a more efficient and effective way.
8. Identifying the functions needed for the online community solution, p 63
   1. The functions needed for online communities can be separated into 2 distinct categories,
      * how the solution functions and
      * attributes of the solution. List the characteristics of each of these.  
        -How user friendly does the solution have to be? How easy is it to use?  
        - How critical is the solution to the online community? How reliable does the solution need to be?   
        - Does the website need to be accessible form mobile devices (is it portable)?   
        - How many people will be accessing the online community at any one time (robustness)?   
        - Who is going to maintain the different sections of the online community?
9. What are the functions of the ILT website solution?  
   -Broadcasting public information  
   - Exchanging private information  
   - Encouraging community groups to exchange their information  
   - Storing documents in a central secure environment  
   - The user friendliness of the online community  
    - Time friendly  
   - Maintaining the solution
10. **Identify the constraints on the solution, p 64**
    1. List the technical and non-technical constraints.  
       The cost of the solution, the speed or time that it takes to access or exchange information, how secure the solution needs to be, and whether the solution needs to be closed or open to the public, the number of people accessing the community at the same time.  
       Are there issues of privacy when exchanging information?  
       Are there copyright issues that need to be taken into consideration?  
       Are there cultural, gender or age constraints that need to be considered?
    2. What are the constraints on the ILT solution?  
       There are strict rules regarding the use of images of deceased Aboriginals and the use of their names on public documents.
11. **Determine the scope of the solution, p 66**
    1. What needs to be considered in the scope of the solution?  
       - Time  
       - Cost  
       - Effort  
       - Quality  
       - Relevancy (timeliness)  
       - Completeness
    2. In the ILT case study list the benefits or the scope of the solution in terms of
       1. Efficiency and  
          - Time   
          - Cost  
          - Effort
       2. Effectiveness  
          - Quality  
          - Relevancy  
          - Timeliness  
          - Clarity